



# DCF-EY-6/105/125-21/22-HTA

## All-Glass Erbium/Ytterbium co-doped double-clad fiber

This Erbium/Ytterbium co-doped fiber offers single-mode operation for excellent beam quality, and its core composition is expertly designed for efficient pump energy conversion in 1.5  $\mu\text{m}$  fiber lasers and amplifiers. Featuring an all-glass design and a high - temperature resistant coating, this fiber is made for the rigorous environmental requirements of the automotive industry and other demanding applications.

### Features & Benefits

- High-temperature resistant coating
- All-glass second cladding design - free of low index polymer
- High energy conversion
- Optimized Er/Yb core composition – reduces 1  $\mu\text{m}$  parasitic emission

### Applications

- Eye-safe fiber lasers and amplifiers for LIDAR
- Space communications
- High-power telecom amplifiers
- Industrial and harsh environment laser sensing

### Related Products

- DCF-UN-6/105/125-21/22-HTA  
Matched all-glass double-clad passive fiber

### Specifications

#### Optical

Cladding Absorption @ 915 nm (dB/m)	1.2 $\pm$ 0.2
Core Absorption @ 1535 nm (dB/m)	75 $\pm$ 20
Cutoff Wavelength (nm)	1385 $\pm$ 95
MFD @ 1550nm ( $\mu\text{m}$ )	6 $\pm$ 0.4
Numerical Aperture - Cladding	Typ. 0.22-0.24
Numerical Aperture - Core	Typ. 0.21

#### Geometrical & Mechanical

Cladding diameter ( $\mu\text{m}$ )	105 $\pm$ 5
Cladding geometry	Oct.
Coating Diameter ( $\mu\text{m}$ )	245 $\pm$ 15
Core Diameter ( $\mu\text{m}$ )	Typ. 5.5
Core/Cladding Concentricity Error ( $\mu\text{m}$ )	$\leq$ 0.8
Outer Cladding Diameter ( $\mu\text{m}$ )	125 $\pm$ 2
Proof Test (kpsi)	$\geq$ 100